

# PROPOSAL EVALUATION

## *Proposition 84 Integrated Regional Water Management (IRWM) Grant Program Implementation Grant, Round 2, 2013*

---

<b>Applicant</b>	Contra Costa Water District	<b>Amount Requested</b>	\$ 3,391,246
<b>Proposal Title</b>	East Contra Costa County IRWM Prop 84 Round 2 Implementation Grant Proposal	<b>Total Proposal Cost</b>	\$ 11,570,783

---

### PROJECT SUMMARY

The proposal consists of six projects: (1) Beacon West Arsenic Well and Tank Replacement; (2) Rossmoor Well Replacement/Groundwater Monitoring Well System Expansion; (3) Integrated Regional Flood Protection and Water Quality Improvement Borrow Area; (4) Knightsen Wetland Restoration and Flood Protection; (5) Recycled Water Salinity Reduction and Distribution System Expansion; and (6) East Contra Costa County Prop 84 Round 2 Grant Administration.

### PROPOSAL SCORE

Criteria	Score/ Max. Possible	Criteria	Score/ Max. Possible
Work Plan	12/15	Technical Justification	6/10
Budget	3/5		
Schedule	5/5	Benefits and Cost Analysis	15/30
Monitoring, Assessment, and Performance Measures	3/5	Program Preferences	10/10
Total Score (max. possible = 80)			54

### EVALUATION SUMMARY

#### WORK PLAN

The criterion is fully addressed but is not supported by thorough documentation or sufficient rationale. The work plan states the goals and objectives of the proposal and how it helps achieve the goals and objectives of the functionally equivalent IRWM Plan. The proposal presents six projects that are summarized in Table 3-1 which includes an abstract, a percent design completion estimate, and identifies the implementing agency. Tasks in the work plan include appropriate deliverables and reporting submittals, including quarterly and final reports. The work plan also includes a list of required permits and the status of environmental documentation. However, project descriptions lack sufficient detail to demonstrate how they will be completed. Most projects will be operational as standalone projects but one is part of a larger phased effort (Project 3). The work plan does not include an adequate description of Data Management and Monitoring Deliverables.

## **BUDGET**

The budgets for more than half of the projects in the proposal have detailed cost information, but not all costs appear reasonable and supporting documentation is lacking for a majority of the budget categories. A proposal summary budget and detailed budgets for each project are provided. The budgets for all projects are broken out by tasks, but costs for some of the projects lack supporting documentation. For example, project 4 only provides a lump sum for the land purchase with no back-up documentation or reference to supporting information, which makes it difficult to determine how the cost was estimated. Project 5 row (g) "Other Costs" includes \$12,150 for legal fees, but no description is included to validate the line item expense. There are also some inconsistencies with the work plan. For example, in the project 5 budget, there are easement costs associated with redirecting the Dow Chemical Company total dissolved solids stream to the District Treatment Plant, but this is not described in the work plan. The project 5 budget also contains substantial costs for pipeline construction but there is little discussion of the pipeline work in the work plan and no figures showing the proposed alignment or new user locations.

## **SCHEDULE**

The schedule criterion is fully addressed and is supported by thorough documentation and logical rationale. Each schedule's tasks are consistent with the work plan and budget and are considered reasonable. The schedule conveys at least one project will be ready to begin construction no later than October 2014.

## **MONITORING, ASSESSMENT, AND PERFORMANCE MEASURES**

The criterion is less than fully addressed and documentation and rationales are incomplete and insufficient. The identified monitoring targets appear appropriate for the benefits claimed in some cases, but some targets could include more specific quantifiable targets. It is not clear from the information provided if the monitoring and assessment tools and methods will effectively monitor the project's performance and target process. The measurement tools and methods for Project 2 seem adequate but there are no numeric targets. Project 3 claims water quality and flood protection benefits, but there is no mention of flood targets, performance indicators and/or measurement tools. Project 4 lacks the detail and targets necessary to track progress to meet targets and projects goals. For example, project 4 should have included numeric water quality targets in order to track progress towards meeting water quality standards in the restored wetland.

## **TECHNICAL JUSTIFICATION**

The proposal appears to be technically justified to achieve the claimed benefits but lacks documentation that demonstrates the technical adequacy and physical benefits of the project are not well described. For example, project 2 claimed both groundwater supply benefits and "Supply Left in Delta" benefits which is a double count. Most of project 3's benefits are not valid, as they are actually created by components of the Contra Costa Canal Levee Elimination and Flood Protection Project or Upper Sand Creek Basin (USCB) Project that are not part of this Proposal.

## **BENEFITS AND COST ANALYSIS**

Collectively the proposal is likely to provide a medium level of benefits in relationship to cost, but the quality of the analysis or clear and complete documentation is lacking. Projects 1 and 2 both appear to provide a high level of benefits (about \$696,000 and \$3,172,000, respectively) in relationship to cost (\$430,000 and \$2,269,000, respectively), but they account for only 23 percent of the Proposal's net present value (NPV) costs. The other three projects, which account for about three-quarters of the Proposal costs, have monetized, documented benefits that are less than costs. However, to the extent that the Knightsen Wetland Restoration and Flood Protection Project enables the purchase of irrigated land suitable for future conversion to habitat, this project might have substantial non-monetized benefits.

Project 3 claims 2.1 percent (450 feet/21,000 feet) of the Contra Costa Canal Levee Elimination and Flood Protection Project's total project benefits because "With the Project, an additional 450 feet of Canal could be encased within a

buried pipeline within the existing funding constraints.” However, from Attachment 4, the project does not include any pipeline costs. Since most project benefits are enabled by the pipeline, not the covering of it, it is inappropriate to claim the 2.1 percent share of total benefits. The project also claims “accelerated USCB [Upper Sand Creek Basin] flood protection benefits.” The project allows FDR benefits to be obtained beginning in 2018 rather than 2023. The claimed benefit is \$27.8 million dollars per year for each of the 5 years. This number is the NPV of flood damage reduction benefits from a previous application. The Expected Annual Damages should have been entered for each of the five years, not the NPV. This reduces the “accelerated USCB flood protection benefits” to \$325,000 (\$5.12 million divided by 15.76).

Project 4 has monetized benefits that are less than costs but non-monetized benefits are probably substantial. The project would purchase about 1 square mile of irrigated land suitable for restoration to a variety of native habitats for \$7,500 an acre. This seems to be an excellent price. The project would fund restoration work on 30 acres, a small fraction of the purchase, and the value of future restoration on over 600 acres is not counted. It might make more sense, for this application, to count only the purchase cost of the 30 acres that is proposed for restoration. The Present Value of monetized benefits (\$2.87 million) is less than costs (\$4.81 million). Water quality and flood damage reduction benefits are not monetized.

Project 5’s analysis inappropriately claims both an avoided cost and a water supply benefit. If the sidestream reverse osmosis (RO) project must be implemented in the without-project condition, then this is the avoided cost, but then the water supply benefits would be achieved either with or without the project. If the without project condition does not include the sidestream RO project, then the water supply benefits should be counted. The available documentation does not suggest that the sidestream RO project is the likely, without-project alternative. The appropriate level of quantified benefit is probably the water supply benefit with energy, fertilizer and greenhouse gas benefits, \$702,336, which is less than the net present value of costs of \$3.077 million.

## **PROGRAM PREFERENCES**

Applicant claims that six program preferences and seven statewide priorities will be met with project implementation. However, applicant demonstrates high degree of certainty, and adequate documentation for 11 of the preferences claimed: (1) Include regional projects or programs; (2) Effectively integrate water management programs and projects; (3) Effectively resolve significant water-related conflicts within or between regions; (4) Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta Program; (5) Address critical water supply or water quality needs of disadvantaged communities within the region; (6) Drought Preparedness; (7) Use and Reuse Water More Efficiently; (8) Expand Environmental Stewardship; (9) Practice Integrated Flood Management; (10) Protect Surface Water and Groundwater Quality; and (11) Ensure Equitable Distribution of Benefits.